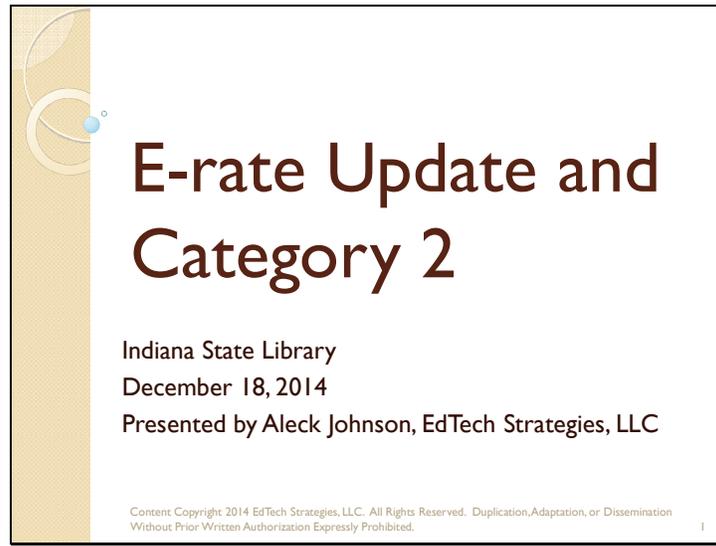


# E-Rate Update and Category 2 Webinar on December 18, 2014

Slide 1



**E-rate Update and  
Category 2**

Indiana State Library  
December 18, 2014  
Presented by Aleck Johnson, EdTech Strategies, LLC

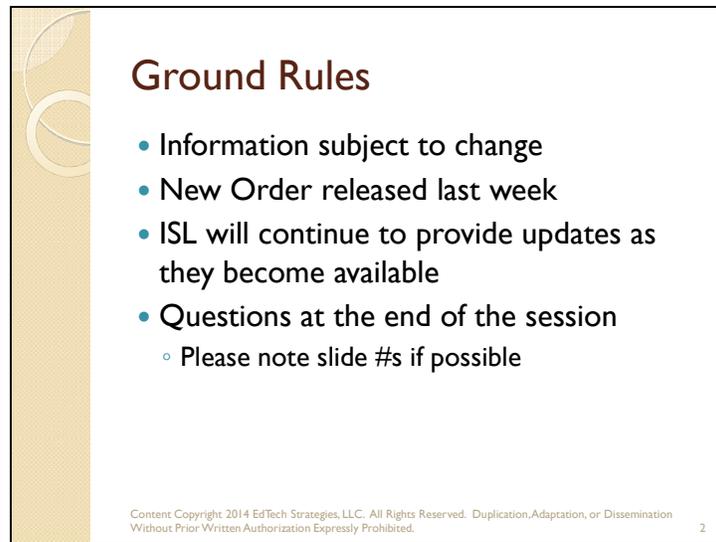
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Slide 2

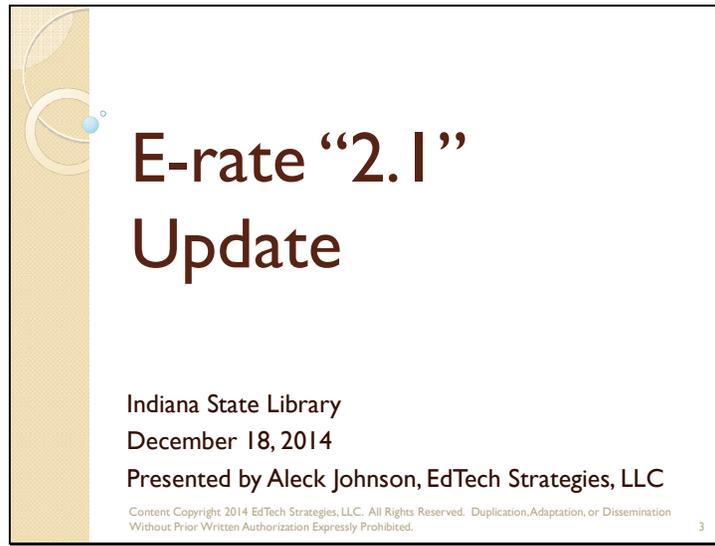


**Ground Rules**

- Information subject to change
- New Order released last week
- ISL will continue to provide updates as they become available
- Questions at the end of the session
  - Please note slide #s if possible

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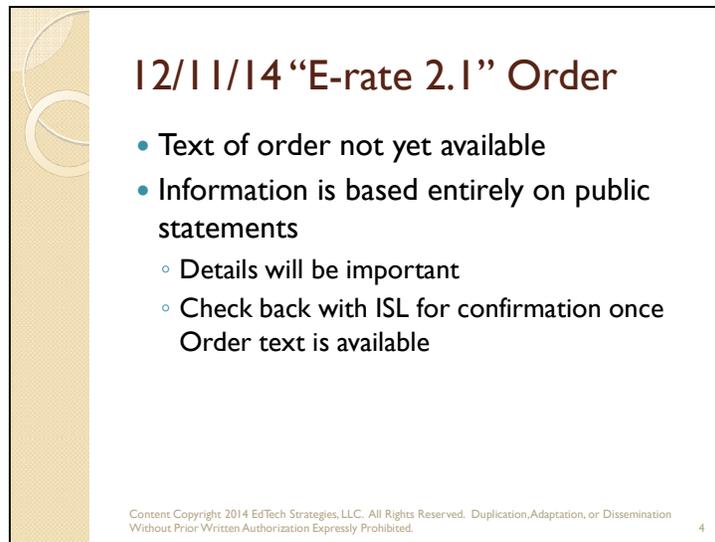
**E-rate “2.1”  
Update**

Indiana State Library  
December 18, 2014  
Presented by Aleck Johnson, EdTech Strategies, LLC

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**12/11/14 “E-rate 2.1” Order**

- Text of order not yet available
- Information is based entirely on public statements
  - Details will be important
  - Check back with ISL for confirmation once Order text is available

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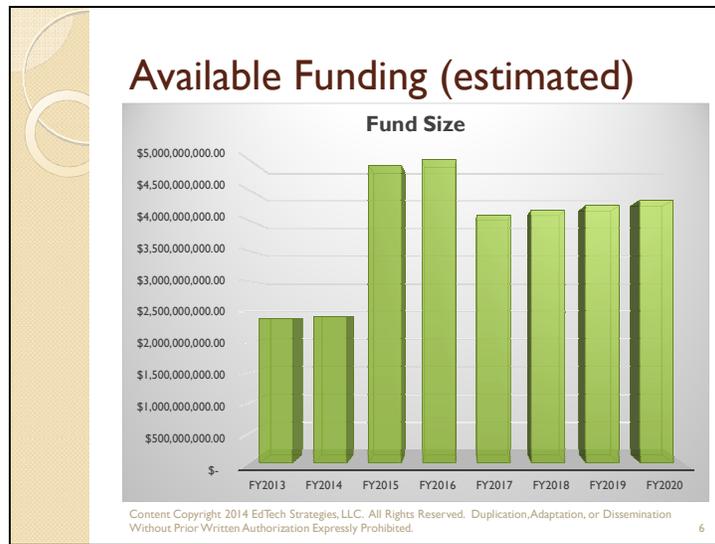
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## E-rate 2.1: Budget Changes

- 2 year pilot on C2 extended to a 5 year pilot
  - Could well end up being permanent
- Expanded funding available
  - Permanent increase of \$1.5B/yr. to the E-rate program
  - Appears to be in addition to the temporary infusion of \$1B/yr. for FY2015 and FY2016
  - Approx. \$4.9B in FY2015 and FY2016, \$3.9B afterwards

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### E-rate 2.1: Rural Definitions

- Rural definitions updated:
  - Census areas with under 25,000 people to be rural
  - Census areas with 25,000 or more people are urban

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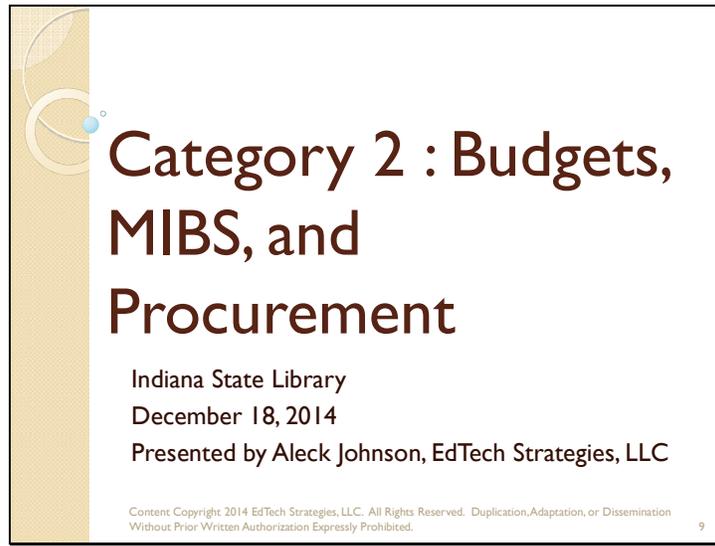
### Fiber Eligibility

- 12/11/14 Order contains language equalizing treatment between dark and lit fiber
- Order text not yet available so details are somewhat lacking
- E-rate will add up to 10% additional funding if state funds 10% of the cost of fiber construction
  - Entirely new so unclear what will happen in IN, but worth watching/considering
- Some changes in 2015, some in 2016 – updates as the order becomes available

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**Category 2 : Budgets,  
MIBS, and  
Procurement**

Indiana State Library  
December 18, 2014  
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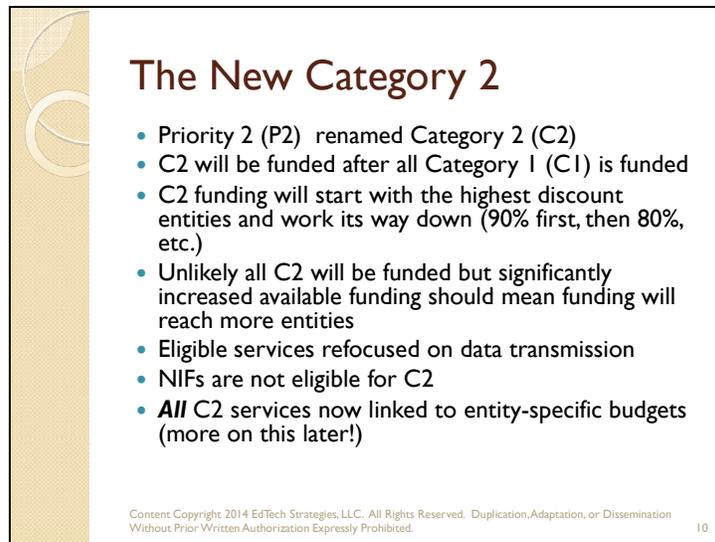
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**The New Category 2**

- Priority 2 (P2) renamed Category 2 (C2)
- C2 will be funded after all Category 1 (C1) is funded
- C2 funding will start with the highest discount entities and work its way down (90% first, then 80%, etc.)
- Unlikely all C2 will be funded but significantly increased available funding should mean funding will reach more entities
- Eligible services refocused on data transmission
- NIFs are not eligible for C2
- **All** C2 services now linked to entity-specific budgets (more on this later!)

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## The Old Priority 2

What services were eligible under the old Priority 2 system?

Before E-rate 2.0: Priority 2 (simplified)	
Routers	UPSes
Switches	PBX
Wireless Controllers	PVBX
Wireless Access Points	Video Components
Wiring/Cabling	Servers
Racks & Cabinets	Software*
Firewalls	Basic Maintenance*

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## The New Category 2

What services are eligible under the new Category 2 system?

After E-rate 2.0: Category 2 (simplified)	
Routers	UPSes
Switches	<del>PBX</del>
Wireless Controllers	<del>PVBX</del>
Wireless Access Points	<del>Video Components</del>
Wiring/Cabling	<del>Servers</del>
Racks & Cabinets	Software*
Firewalls	Basic Maintenance*
Managed Internal Broadband Services	Caching

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### Category 2: Eliminated Services

- What are the services that were eliminated?
  - Elimination of voice-related devices, such as PBXs
  - Elimination of video-related devices, such as PVBXs and Video Components
  - Elimination of servers (except for caching)

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### Category 2: New Services

- What are the new services that are eligible?
  - Caching – little detail released, but caching servers and devices appear to be eligible
  - Managed Internal Broadband Services
    - FCC invented term and category
    - Grows out of the “managed wi-fi” services offered by many companies
    - Extends to all network components

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### Understanding Category 2 Budgets

- New budget system applies **only** to Category 2 services (Internal Connections and Basic Maintenance of Internal Connections)
- Replaces the old 2 in 5 rule (at least for the next 5 years)
- Five year budget based on the size of the library outlet (for schools, based on enrollment)
  - \$2.30/sq. ft. over five years **pre-discount**
  - Minimum budget for a library is \$9,200
    - Library outlets of 4,000 sq. ft. or less use the minimum
  - Some urban libraries will have a \$5.00/sq. ft. over five years pre-discount budget (details TBD, appears to affect libraries serving over 250,000 people only)

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### Understanding Category 2 Budgets

- Budgets cover a rolling five year period and are recalculated annually based on enrollment and square footage and can go up or down
- Funding commitments in FY2015 count against the budget for the next four years
- Products or services ordered in excess of budget will not be funded
- Initially presented as a two year pilot program, extended for 5 years by 12/11/14 Order

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### Understanding Category 2 Budgets

- Category 2 budgets are calculated on an outlet or branch basis rather than a system basis
- Non-instructional facilities (NIFs) – including administrative buildings – do not get Category 2 budgets
  - If equipment shared by library branches is located in a NIF, the branches can allocate some of their funding toward the NIF for that equipment
  - Services for the NIF itself should be allocated out as ineligible
- Library systems cannot average or join budgets across multiple outlets, and unused funds cannot be rolled from one outlet to another

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### Calculating Budgets

- Library budgets are calculated by multiplying the square footage of the library (inside the walls) by \$2.30 (or \$5.00 for some large urban libraries)
  - Minimum budget is \$9,200
  - Square footage available from IMLS at [http://www.imls.gov/research/public\\_libraries\\_in\\_the\\_united\\_states\\_survey.aspx](http://www.imls.gov/research/public_libraries_in_the_united_states_survey.aspx)
    - This data may be incorrect!
    - Can use other sources, just document it for your files

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### Calculating Budgets

- Example 1: Library A is a 6,000 sq. ft. library
  - C2 budget is  $6,000 \times \$2.30 = \$13,800$  over five years
- Example 2: Library B is a 2,500 sq. ft. library
  - C2 budget would be  $2,500 \times \$2.30 = \$5,750$ .  
HOWEVER, this is under the minimum, so budget is \$9,200.
- Remember that these budgets are **pre-discount**

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### Documenting Budgets

- USAC expected to have a tool available to track budgets starting in FY2016
- Item 21 attachment will allow allocation of budget between multiple entities
  - Straight line (all entities share equally)
  - Proportional (based on sq. footage)
  - Specific (each entity has a specified share)
- For now, be sure to keep your own records of how (and why) budgets are allocated
- When budgets are allocated between entities, allocation must be based on tangible criteria leading to a reasonable result

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### Budget Purchasing Example

- Library A (pre-discount budget \$13,800) qualifies for a 70% discount and wants to purchase \$10,000 in wireless access points in FY2015
  - Once approved, Library A has \$3,800 remaining for the next four funding years
  - Library A receives \$7,000 in E-rate discounts/reimbursements on the purchase of the APs ( $\$10,000 \times 70\%$ ) and has an “out of pocket” expense of \$3,000
  - \$10,000 is restored to Library A’s C2 pre-discount budget in FY2020

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### Budget Purchasing Example

- Library B (pre-discount budget \$9,200) qualifies for a 70% discount and wants to purchase \$10,000 in wireless access points.
  - Once approved, Library B has \$0 remaining for the next four funding years
  - Library B receives \$6,440 in E-rate discounts/reimbursements on the purchase of the APs ( $\$9,200 \times 70\%$ ) and has an “out of pocket” expense of \$3,560
  - \$9,200 is restored to Library B’s C2 pre-discount budget in FY2020

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### Budgeting Shared Services

Library A (6,000 sq. feet) and Library B (2,500 sq. feet) apply to share a \$1,000 wireless controller

Straight Line	Proportional (Sq. Ft.)	Specific
A = \$500	$A = 6,000/8,500 \times \$1,000 = \$705.88$	A=80%=\$800
B = \$500	$B = 2,500/8,500 \times \$1,000 = \$194.12$	B=20%=\$200
TOTAL: \$1,000	TOTAL: \$1,000	TOTAL: \$1,000

FCC has given applicants the flexibility to choose the method that works best the specific applicant. Must be able to justify the method selected!

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### Budgets in Future Years

- Budgets are five year rolling budgets
  - Funds are “restored” five years after the funding year in question
  - Funds are removed from the budget when they are committed (not when they are spent!)
  - Funds can be returned to the budget using the Form 500 to reduce or cancel and funding commitment

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### Managed Internal Broadband Services

- “A service is eligible for support as managed internal broadband services” if provided by a third party for the operation, management, and/or monitoring of the eligible components of a school or library local area network (LAN) and wireless LAN

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### Managed Internal Broadband Services

- MIBS is subject to the budget constraints of all Category 2 services
- MIBS primarily focusing today on managed wi-fi
  - Expect lots of vendor interest on managed wi-fi today and managed network components in the near future
  - Pricing appears to be remarkably close to the budgets proposed
    - Some exceptions when procured in volume

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### Category 2: Managed Wi-Fi vs. Traditional Wi-Fi

- Traditional Wi-Fi
  - Library owns and manages the access points on the library network
  - Management typically done through a wireless controller
- Managed Wi-Fi
  - Two major purchasing models: either library owns the access points and pays for management separately or service provider owns the APs and bundles the cost of APs and management
  - Management done through a virtual controller located offsite
- In both cases Wi-Fi typically shares the library's Internet bandwidth

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### Category 2: Managed Wi-Fi vs. Traditional Wi-Fi

- Traditional Wi-Fi
  - One time capital expense
  - Sometimes an ongoing expense for warranties/updates
- Managed Wi-Fi
  - Possible one time expense
  - Sometimes an ongoing expense for warranties/updates
  - Ongoing management expenses

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### Major Vendors of MIBS and Traditional Wi-Fi

- Cisco
  - Meraki
- Aruba
- Aerohive
- Ruckus
- Meru

...and lots (and lots) of others

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### Category 2: Managed Wi-Fi Procurement Guidance

- Prior to procurement, conduct a site survey if possible
  - Allows you much better information regarding what your Wi-Fi needs will be
- Can issue an RFP for greater control
  - Useful if there are existing infrastructure concerns
  - Also useful if needs are not easily described in Form 470
  - RFPs generally strongly recommended

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### Category 2: Managed Wi-Fi Procurement Guidance

- RFPs may be required
- IC 5-22-7 requires the purchasing agent to bid public purchases unless another purchasing method is required or authorized, as follows:
  - IC 5-22-8-3 If the purchase is expected to be at least \$50,000 but less than \$150,000, the purchasing agent may invite quotes from at least three persons known to deal in the lines or classes of supplies to be purchased.
  - IC 5-22-8-2 If the purchase is expected to be less than \$50,000, the purchasing agent may make a purchase under the small purchases policies established or rules adopted by the library.
  - IC 5-22-9-1 The purchasing agent may award a contract using the request for proposal process in accordance with the purchasing policies of the library. No statutory dollar threshold is associated with this method.
- Each of these methods have certain statutory procedures which must be followed. In addition, the library should have its own purchasing policy which may supplement IC 5-22 and not be inconsistent with IC 5-22
- Consult Karen and/or your attorney for more information

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### Category 2: Managed Wi-Fi Procurement Guidance

- RFP Benefits
  - Greater control of process
  - Greater specificity on services sought
  - Greater control over conditions/bid response formats
  - Easier to control flow of information to vendors
- RFP Drawbacks
  - Requires planning
    - Board approval of RFP
  - Additional time (e.g. Q&A)
  - Lots of extra work if little or no competition

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### Category 2: Managed Wi-Fi Procurement Guidance

- FCC 14-99: “We encourage districts to request bids in technologically neutral ways and compare the cost-effectiveness of bids for self-provisioned networks with those for managed Wi-Fi contracts. We also encourage schools and libraries considering managed Wi-Fi to evaluate the value of joining a consortium of schools and libraries to increase their buying power and drive down costs.”

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### E-rate Requirements for Internal Connections and MIBS

- Applicants can/should provide as much information as possible regarding requirements
  - Services sought
  - Infrastructure upgrades
- Pre-work beneficial (site survey, etc.)
- Seek bids on both managed and unmanaged
  - PIA questions likely to reflect need to evaluate both
  - Compare apples to apples to get most cost effective service

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## Category 2: Managed Wi-Fi Procurement Guidance

- If not using an RFP...
  - Speak to your needs
  - Be as specific as possible
  - Leave yourself some flexibility

Example:\*

Service	Quantity and/or Capacity
Wireless Access Points	Est. 12 wireless access points to service 6,000 sq. ft. library. Must support 802.11ac and POE. Compatibility with Brand Z Model Y controller preferred.
Managed Internal Broadband Service	Est. 12 wireless access points and management of those APs to service 6,000 sq. ft. library.

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## Category 2: Managed Wi-Fi Procurement Guidance

- Be sure to include not just APs but the related infrastructure if necessary
  - Wiring/cabling
  - Power over Ethernet switching
  - Wireless controller

Example:\*

Service	Quantity and/or Capacity
Wiring/Cabling	Category 6 wiring to support APs requested in this application. Req. 2 cables per AP.
Network Switches	24 port 10/100/1000 POE switch.
Wireless Controller(s)	Controller(s) for wireless access points requested in this application.

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### Bid Evaluation Hints

- Must use a bid evaluation matrix
- Price of eligible goods and services must be the most heavily weighted factor
  - Other factors can include (and are not limited to)
    - Compatibility with existing infrastructure
    - Price of ineligible goods and services (training, power, etc.)
    - Reputation of vendor
  - Use bid evaluation criteria to determine the most cost effective service for meeting your needs
- Not required to purchase low bid
- Document, document, document

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### State Master Contracts and Preferred Master Contracts

- There are no current state master contracts covering MIBS so not available for FY2015
- FCC working on developing “preferred master contracts” for FY2016
- These master contracts will likely require a mini-bid evaluation process
- You have no control over a master contract and potential violations, so you may want to file your own 470 just to be safe

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## E-Rate Update and Category 2 Webinar on December 18, 2014

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